

WHAT IS CLAIMED IS:

1. A computer system programmed for electronically teaching phonics, said computer system programmed to:

identify an alphabetic character for each block resting at a particular time in each of a plurality of block stations; and

determine a phoneme for each identified alphabetic character.

2. The computer system of Claim 1 further programmed to determine each of said phonemes according to a set of phonics rules and according to the alphabetic characters identified for each block resting in the block stations at a particular time.

3. The computer system of Claim 1 further programmed to:

form a word search key comprised of said identified alphabetic characters; and

retrieve an entry for said word search key from a dictionary of words.

4. The computer system of Claim 3 wherein each block resting in a block station has a face resting in close, approximately horizontal proximity to a floor surface of said block station and wherein each resting block face rests at a first distance from a sensing device underneath said floor surface of said block station, said computer system further programmed to:

identify as a pressed block a block for which the resting block face of said block rests at a second distance from the sensing device wherein said second distance is less than said first distance;

use as a phoneme search key a phoneme instruction provided by said dictionary entry wherein said phoneme instruction positionally corresponds to a relative position of the identified alphabetic character a virtual word consisting of the identified alphabetic characters for the blocks resting in the block stations;

10 locate an entry in a phoneme table for said phoneme search key; and

deliver as an audible sound a phoneme representation from said phoneme entry in the phoneme table.

15 5. The computer system of Claim 1 further programmed to:

compare each identified alphabetic character to the alphabetic characters identified for each block resting in the block stations at a particular time;

20 identify a set of phonetic relationships between the identified alphabetic character;

analyze each of said phonetic relationships according to a set of phonics rules; and

25 determine for each identified alphabetic character a phoneme according to said phonetic relationships.

30 6. The computer system of Claim 5 wherein each block resting in a block station has a face resting in close, approximately horizontal proximity to a floor surface of said block station and wherein each resting block face rests at a first distance from a sensing device underneath said floor surface of said block station, said computer system further programmed to:

35

identify as a pressed block a block for which the resting block face of said block rests at a second distance from the sensing device wherein said second distance is less than said first distance; and

deliver as an audible sound the phoneme for the alphabetic character identified for said pressed block.

7. The computer system of Claim 6 further programmed to:

identify a first block station containing a block; and

overlay a first digit of a binary template to coincide with the first block station containing a block.

8. The computer system of Claim 7, wherein a lighting feature is associated with each block station, said computer system further programmed to:

instruct the lighting feature associated with said block station containing said pressed block to light; and

instruct each lighting feature associated with each block station containing a block identified as phonetically related to said pressed block to light.

9. The computer system of Claim 1 wherein in order to identify an alphabetic character for a block resting at a particular time in a block station, the computer system is further programmed to:

serially generate a plurality of digital drive signals to a plurality of drive electrodes configured in a planar array, said drive electrodes being exposed for capacitive coupling with a conductive layer;

serially charge each of said drive electrodes with said drive signal to capacitively induce by each of said charged drive electrodes a charge in a plane comprising a pattern of electrically conductive material and nonconductive material, said pattern being configured to have a plurality of pickup areas, a plurality of nonconducting areas, and a common transmitting area, wherein said pattern corresponds to a unique bit pattern, wherein each of said pickup areas conducts said induced charge to said transmitting area, and wherein said transmitting area induces a charge in a set of at least one pickup electrode configured in an area of said planar array;

interpret as a bit pattern changes in induced charges picked up by said set of pickup electrodes;

use said bit pattern as a key to a lookup table, said lookup table being comprised of a plurality of keys, each key corresponding to an alphabetic character identifier; and

retrieve from said lookup table said corresponding alphabetic character identifier.

10. A computer program product for electronically teaching phonics, said computer program product having instructions for:

identifying an alphabetic character for each block resting at a particular time in each of a plurality of block stations; and

determining a phoneme for each identified alphabetic character.

11. The computer program product of Claim 10 having further instructions for:

determining each of said phonemes according to a set of phonics rules and according to the alphabetic characters identified for each block resting in the block stations at a particular time.

12. The computer program product of Claim 10 having further instructions for:

forming a word search key comprised of said identified alphabetic characters; and

retrieving an entry for said word search key from a dictionary of words.

13. The computer program product of Claim 12 wherein each block resting in a block station has a face resting in close, approximately horizontal proximity to a floor surface of said block station and wherein each resting block face rests at a first distance from a sensing device underneath said floor surface of said block station, said computer program product having further instructions for:

identifying as a pressed block a block for which the resting block face of said block rests at a second distance from the sensing device wherein said second distance is less than said first distance;

using as a phoneme search key a phoneme instruction provided by said dictionary entry wherein said phoneme instruction positionally corresponds to a relative position of the identified alphabetic character a virtual word consisting of the identified alphabetic characters for the blocks resting in the block stations;

locating an entry in a phoneme table for said phoneme search key; and

5 delivering as an audible sound a phoneme representation from said phoneme entry in the phoneme table.

14. The computer program product of Claim 10 having further programming instructions for:

10 comparing each identified alphabetic character to the alphabetic characters identified for each block resting in the block stations at a particular time;

identifying a set of phonetic relationships between the identified alphabetic character;

15 analyzing each of said phonetic relationships according to a set of phonics rules; and

determining for each identified alphabetic character a phoneme according to said phonetic relationships.

- 20 15. The computer program product of Claim 14 wherein each block resting in a block station has a face resting in close, approximately horizontal proximity to a floor surface of said block station and wherein each resting block face rests at a first distance from a sensing device underneath said floor surface of said block station, said computer program product having further instructions for:

25 identifying as a pressed block a block for which the resting block face of said block rests at a second distance from the sensing device wherein said second distance is less than said first distance; and

30 delivering as an audible sound the phoneme for the alphabetic character identified for said pressed block.

16. The computer program product of Claim 15 having further programming instructions for:

5 identifying a first block station containing a block; and

overlaying a first digit of a binary template to coincide with the first block station containing a block.

10

17. The computer program product of Claim 16, wherein a lighting feature is associated with each block station, said computer program product having further programming instructions for:

15 instructing the lighting feature associated with said block station containing said pressed block to light; and

20 instructing each lighting feature associated with each block station containing a block identified as phonetically related to said pressed block to light.

25 18. The computer program product of Claim 10 wherein in order to identify an alphabetic character for a block resting at a particular time in a block station, said computer program product has further programming instructions for:

serially generating a plurality of digital drive signals to a plurality of drive electrodes configured in a planar array, said drive electrodes being exposed for capacitive coupling with a conductive layer;

30 serially charging each of said drive electrodes with said drive signal to capacitively induce by each of said charged drive electrodes a charge in a plane comprising a pattern of electrically conductive material and nonconductive material, said pattern
35 being configured to have a plurality of pickup areas,

a plurality of nonconducting areas, and a common transmitting area, wherein said pattern corresponds to a unique bit pattern, wherein each of said pickup areas conducts said induced charge to said transmitting area, and wherein said transmitting area induces a charge in a set of at least one pickup electrode configured in an area of said planar array;

interpreting as a bit pattern changes in induced charges picked up by said set of pickup electrodes;

using said bit pattern as a key to a lookup table, said lookup table being comprised of a plurality of keys, each key corresponding to an alphabetic character identifier; and

retrieving from said lookup table said corresponding alphabetic character identifier.

19. A method using a computer for electronically teaching phonics, said method comprising:

identifying an alphabetic character for each block resting at a particular time in each of a plurality of block stations; and

determining a phoneme for each identified alphabetic character.

20. The method of Claim 19 further comprising determining each of said phonemes according to a set of phonics rules and according to the alphabetic characters identified for each block resting in the block stations at a particular time.

21. The method of Claim 19 further comprising:

forming a word search key comprised of said identified alphabetic characters; and

retrieving an entry for said word search key from
a dictionary of words.

5

22. The method of Claim 21 wherein each block resting in a
block station has a face resting in close, approximately
horizontal proximity to a floor surface of said block
station and wherein each resting block face rests at a
10 first distance from a sensing device underneath said floor
surface of said block station, said method further
comprising:

identifying as a pressed block a block for which
the resting block face of said block rests at a second
distance from the sensing device wherein said second
distance is less than said first distance;

using as a phoneme search key a phoneme
instruction provided by said dictionary entry wherein
said phoneme instruction positionally corresponds to
a relative position of the identified alphabetic
character a virtual word consisting of the identified
alphabetic characters for the blocks resting in the
block stations;

locating an entry in a phoneme table for said
phoneme search key; and

delivering as an audible sound a phoneme
representation from said phoneme entry in the phoneme
table.

30 23. The method of Claim 19 further comprising:

comparing each identified alphabetic character to
the alphabetic characters identified for each block
resting in the block stations at a particular time;

identifying a set of phonetic relationships
35 between the identified alphabetic character;

analyzing each of said phonetic relationships according to a set of phonics rules; and

5 determining for each identified alphabetic character a phoneme according to said phonetic relationships.

10 24. The method of Claim 23 wherein each block resting in a block station has a face resting in close, approximately horizontal proximity to a floor surface of said block station and wherein each resting block face rests at a first distance from a sensing device underneath said floor surface of said block station, said method further comprising:

15 identifying as a pressed block a block for which the resting block face of said block rests at a second distance from the sensing device wherein said second distance is less than said first distance; and

20 delivering as an audible sound the phoneme for the alphabetic character identified for said pressed block.

25 25. The method of Claim 24 further comprising:

identifying a first block station containing a block; and

30 overlaying a first digit of a binary template to coincide with the first block station containing a block.

26. The method of Claim 25, wherein a lighting feature is associated with each block station, said method further comprising:

instructing the lighting feature associated with
said block station containing said pressed block to
light; and

instructing each lighting feature associated with
each block station containing a block identified as
phonetically related to said pressed block to light.

27. The method of Claim 19 wherein in order to identify an
alphabetic character for a block resting at a particular
time in a block station, said method further comprising:

serially generating a plurality of digital drive
signals to a plurality of drive electrodes configured
in a planar array, said drive electrodes being exposed
for capacitive coupling with a conductive layer;

serially charging each of said drive electrodes
with said drive signal to capacitively induce by each
of said charged drive electrodes a charge in a plane
comprising a pattern of electrically conductive
material and nonconductive material, said pattern
being configured to have a plurality of pickup areas,
a plurality of nonconducting areas, and a common
transmitting area, wherein said pattern corresponds to
a unique bit pattern, wherein each of said pickup
areas conducts said induced charge to said
transmitting area, and wherein said transmitting area
induces a charge in a set of at least one pickup
electrode configured in an area of said planar array;

interpreting as a bit pattern changes in induced
charges picked up by said set of pickup electrodes;

using said bit pattern as a key to a lookup
table, said lookup table being comprised of a
plurality of keys, each key corresponding to an
alphabetic character identifier; and

retrieving from said lookup table said
corresponding alphabetic character identifier.

5

28. A computer phonics teaching system for electronically
teaching phonics, said system comprising:

10

program instructions for identifying an
alphabetic character for each block resting at a
particular time in each of a plurality of block
stations; and

program instructions for determining a phoneme
for each identified alphabetic character.

15

29. The computer phonics teaching system of Claim 28, said
system further comprising:

20

program instructions for determining each of said
phonemes according to a set of phonics rules and
according to the alphabetic characters identified for
each block resting in the block stations at a
particular time.

25

30. The computer phonics teaching system of Claim 28, said
system further comprising:

program instructions for forming a word search
key comprised of said identified alphabetic
characters; and

program instructions for retrieving an entry for
said word search key from a dictionary of words.

30

31. The computer phonics teaching system of Claim 30 wherein
each block resting in a block station has a face resting in
close, approximately horizontal proximity to a floor
surface of said block station and wherein each resting
block face rests at a first distance from a sensing device

35

underneath said floor surface of said block station, said system further comprising:

5 program instructions for identifying as a pressed block a block for which the resting block face of said block rests at a second distance from the sensing device wherein said second distance is less than said first distance;

10 program instructions for using as a phoneme search key a phoneme instruction provided by said dictionary entry wherein said phoneme instruction positionally corresponds to a relative position of the identified alphabetic character a virtual word consisting of the identified alphabetic characters for the blocks resting in the block stations;

program instructions for locating an entry in a phoneme table for said phoneme search key; and

15 program instructions for delivering as an audible sound a phoneme representation from said phoneme entry in the phoneme table.

32. The computer phonics teaching system of Claim 28, said system further comprising:

25 program instructions for comparing each identified alphabetic character to the alphabetic characters identified for each block resting in the block stations at a particular time;

30 program instructions for identifying a set of phonetic relationships between the identified alphabetic character;

program instructions for analyzing each of said phonetic relationships according to a set of phonics rules; and

program instructions for determining for each
identified alphabetic character a phoneme according to
said phonetic relationships.

33. The computer phonics teaching system of Claim 32 wherein
each block resting in a block station has a face resting in
close, approximately horizontal proximity to a floor
surface of said block station and wherein each resting
block face rests at a first distance from a sensing device
underneath said floor surface of said block station, said
system further comprising:

program instructions for identifying as a pressed
block a block for which the resting block face of said
block rests at a second distance from the sensing
device wherein said second distance is less than said
first distance; and

program instructions for delivering as an audible
sound the phoneme for the alphabetic character
identified for said pressed block.

34. The computer phonics teaching system of Claim 33, said
system further comprising:

program instructions for identifying a first
block station containing a block; and

program instructions for overlaying a first digit
of a binary template to coincide with the first block
station containing a block.

35. The computer phonics teaching system of Claim 34, wherein
a lighting feature is associated with each block station,
said system further comprising:

program instructions for instructing the lighting feature associated with said block station containing said pressed block to light; and

program instructions for instructing each lighting feature associated with each block station containing a block identified as phonetically related to said pressed block to light.

36. The computer phonics teaching system of Claim 28 wherein in order to identify an alphabetic character for a block resting at a particular time in a block station, said system further comprising:

program instructions for serially generating a plurality of digital drive signals to a plurality of drive electrodes configured in a planar array, said drive electrodes being exposed for capacitive coupling with a conductive layer;

program instructions for serially charging each of said drive electrodes with said drive signal to capacitively induce by each of said charged drive electrodes a charge in a plane comprising a pattern of electrically conductive material and nonconductive material, said pattern being configured to have a plurality of pickup areas, a plurality of nonconducting areas, and a common transmitting area, wherein said pattern corresponds to a unique bit pattern; wherein each of said pickup areas conducts said induced charge to said transmitting area, and wherein said transmitting area induces a charge in a set of at least one pickup electrode configured in an area of said planar array;

program instructions for interpreting as a bit pattern changes in induced charges picked up by said set of pickup electrodes;

program instructions for using said bit pattern as a key to a lookup table, said lookup table being comprised of a plurality of keys, each key corresponding to an alphabetic character identifier; and

program instructions for retrieving from said lookup table said corresponding alphabetic character identifier.

37. A device for electronically teaching phonics, said device comprising:

a base unit providing a plurality of block stations, each block station for receiving a block, each block station having a floor surface, said floor surface recessed from the top surface of the base unit, said floor surface having a plurality of upward projections, each projection having a first length;

a sensing device underneath the floor surface of each block station;

a plurality of blocks, each block having six faces, each block face featuring an alphabetic character, each block face having an inner surface comprising a pattern of electrically conductive material and nonconductive material configured in a plane wherein said pattern corresponds to a bit pattern that identifies the alphabetic character featured on the outer surface of the opposing face of the block;

a computer device configured to communicate with each of said sensing devices;

5 said computer device programmed to identify the alphabetic character featured on each block resting at a particular time in each of said block stations according to information provided by each of said sensing devices; and

10 said computer device further programmed to determine a phoneme for each identified alphabetic character.

38. A method of electronically teaching phonics to a player, comprising:

15 determining an alphabetic sequence from lettered objects arranged by the player;

generating a phoneme sequence according to the alphabetic sequence; and

20 generating an audio signal for the player according to the phoneme sequence.

39. The method of Claim 38, wherein generating the phoneme sequence includes:

25 matching the alphabetic sequence with a word stored in a word dictionary;

reading a phoneme key sequence associated with the word in the word dictionary; and

generating the phoneme sequence from the phoneme key sequence.

30 40. The method of Claim 38, wherein generating the phoneme sequence includes analyzing the alphabetic sequence using a set of phonics rules.

35 41. The method of Claim 38, wherein generating the phoneme sequence includes:

determining that the alphabetic sequence does not match a word stored in a word dictionary; and

5 generating the phoneme sequence by analyzing the alphabetic sequence using a set of phonics rules.

42. A method of electronically teaching phonics to a player, comprising:

10 determining an alphabetic sequence from lettered objects arranged by the player;

receiving a selection signal corresponding to a selected element of the alphabetic sequence;

15 generating a phoneme for the selected element of the alphabetic sequence; and

generating an audio signal according to the phoneme.

43. The method of Claim 42, wherein generating the phoneme includes:

20 matching the alphabetic sequence with a word stored in a word dictionary;

25 reading a phoneme key for the selected element of the alphabetic sequence associated with the word in the word dictionary; and

generating the phoneme from the phoneme key.

44. The method of Claim 43, further comprising:

30 reading visual display instructions associated with the word in the word dictionary; and

generating visual display signals according to the visual display instructions.

45. The method of Claim 43, wherein generating the phoneme includes:

determining that the alphabetic sequence does not match a word stored in a word dictionary; and

5 generating the phoneme by analyzing the alphabetic sequence using a set of phonics rules.

46. The method of Claim 45, further comprising:

10 generating visual display instructions by analyzing the alphabetic sequence using a set of phonics rules; and

generating visual display signals according to the visual display instructions.

47. A method of electronically teaching phonics to a player using a plurality of lettered objects, comprising:

15 providing a plurality of stations;

determining an alphabetic sequence from lettered objects placed by the player in the plurality of stations;

20 matching the alphabetic sequence with a word stored in a word dictionary;

reading a phoneme key sequence associated with the word in the word dictionary;

25 generating the phoneme sequence from the phoneme key sequence;

generating an audio signal according to the phoneme sequence;

reading visual display instructions associated with the word in the word dictionary; and

30 lighting one of a plurality of lighting features associated with the plurality of stations using the visual display instructions.

48. The method of Claim 47 wherein the lettered objects are
35 blocks.

1 42624/FLC/N240

49. The method of Claim 47 wherein the lettered objects are
5 tiles.

50. A method of electronically teaching phonics to a player
using a plurality of lettered objects, comprising:

providing a plurality of stations;

10 determining an alphabetic sequence from lettered
objects placed by the player in the plurality of
stations;

generating the phoneme by analyzing the
alphabetic sequence using a set of phonics rules;

15 generating an audio signal according to the
phoneme sequence;

generating visual display instructions by
analyzing the alphabetic sequence using a set of
phonics rules; and

20 lighting one of a plurality of lighting features
associated with the plurality of stations using the
visual display instructions.

25 51. The method of Claim 50 wherein the lettered objects are
blocks.

52. The method of Claim 50 wherein the lettered objects are
tiles.

30 53. An apparatus for teaching phonics to a player, comprising:
a processor; and

a memory operably coupled to the processor and
having program instructions stored therein, the
processor being operable to execute the program
35 instructions, the program instructions including:

determining an alphabetic sequence from
lettered objects arranged by the player;

5 generating a phoneme sequence according to
the alphabetic sequence; and

generating an audio signal for the player
according to the phoneme sequence.

10 54. The apparatus of Claim 53, wherein the program instructions
for generating the phoneme sequence include:

matching the alphabetic sequence with a word
stored in a word dictionary;

5 reading a phoneme key sequence associated with
the word in the word dictionary; and

generating the phoneme sequence from the phoneme
key sequence.

20 55. The apparatus of Claim 53, wherein the program instructions
for generating the phoneme sequence include analyzing the
alphabetic sequence using a set of phonics rules.

25 56. The apparatus of Claim 53, wherein the program instructions
for generating the phoneme sequence include:

determining that the alphabetic sequence does not
match a word stored in a word dictionary; and

generating the phoneme sequence by analyzing the
alphabetic sequence using a set of phonics rules.

30 57. An apparatus for teaching phonics to a player, comprising:
a processor; and

a memory operably coupled to the processor and
having program instructions stored therein, the
processor being operable to execute the program
instructions, the program instructions including:

determining an alphabetic sequence from
lettered objects arranged by the player;

5 receiving a selection signal corresponding
to a selected element of the alphabetic sequence;

generating a phoneme for the selected
element of the alphabetic sequence; and

10 generating an audio signal according to the
phoneme.

58. The apparatus of Claim 57, wherein the program instructions
for generating the phoneme include:

15 matching the alphabetic sequence with a word
stored in a word dictionary;

reading a phoneme key for the selected element of
the alphabetic sequence associated with the word in
the word dictionary; and

20 generating the phoneme from the phoneme key.

59. The apparatus of Claim 58, the program instructions further
including:

25 reading visual display instructions associated with
the word in the word dictionary; and

generating visual display signals according to the
visual display instructions.

60. The apparatus of Claim 57, wherein the program instructions
for generating the phoneme include:

30 determining that the alphabetic sequence does not
match a word stored in a word dictionary; and

generating the phoneme by analyzing the alphabetic
sequence using a set of phonics rules.

61. The apparatus of Claim 60, the program instructions further including:

5 generating visual display instructions by analyzing the alphabetic sequence using a set of phonics rules; and
 generating visual display signals according to the visual display instructions.

10 62. An apparatus for teaching phonics to a player, comprising:

 a processor;

 a plurality object sensing stations;

 a memory operably coupled to the processor and having program instructions stored therein, the processor being operable to execute the program instructions, the program instructions including:

 determining an alphabetic sequence from lettered objects placed by the player in the plurality of object sensing stations;

 matching the alphabetic sequence with a word stored in a word dictionary;

 reading a phoneme key sequence associated with the word in the word dictionary;

 generating the phoneme sequence from the phoneme key sequence;

 generating an audio signal according to the phoneme sequence;

 reading visual display instructions associated with the word in the word dictionary;
30 and

 lighting one of a plurality of lighting features associated with the plurality of stations using the visual display instructions.

63. The apparatus of Claim 62 wherein the lettered objects are blocks.

5

64. The apparatus of Claim 62 wherein the lettered objects are tiles.

10

65. An apparatus for teaching phonics to a player, comprising:

a processor;

a plurality object sensing stations;

a memory operably coupled to the processor and having program instructions stored therein, the processor being operable to execute the program instructions, the program instructions including:

5

determining an alphabetic sequence from lettered objects placed by the player in the plurality of stations;

20

generating the phoneme by analyzing the alphabetic sequence using a set of phonics rules;

generating an audio signal according to the phoneme sequence;

25

generating visual display instructions by analyzing the alphabetic sequence using a set of phonics rules; and

lighting one of a plurality of lighting features associated with the plurality of stations using the visual display instructions.

30

66. The apparatus of Claim 65 wherein the lettered objects are blocks.

67. The apparatus of Claim 65 wherein the lettered objects are tiles.

35

68. A processor-readable storage medium embodying processor program instructions for execution by a processor, the processor program instructions adapting a processor to teach phonics to a player, the processor program instructions including:

determining an alphabetic sequence from lettered objects arranged by the player;

generating a phoneme sequence according to the alphabetic sequence; and

generating an audio signal for the player according to the phoneme sequence.

69. The processor-readable storage medium of Claim 68, wherein the process program instructions for generating the phoneme sequence include:

matching the alphabetic sequence with a word stored in a word dictionary;

reading a phoneme key sequence associated with the word in the word dictionary; and

generating the phoneme sequence from the phoneme key sequence.

70. The processor-readable storage medium of Claim 68, wherein the processor program instructions for generating the phoneme sequence include analyzing the alphabetic sequence using a set of phonics rules.

71. The processor-readable storage medium of Claim 68, wherein the processor program instructions for generating the phoneme sequence include:

determining that the alphabetic sequence does not match a word stored in a word dictionary; and

generating the phoneme sequence by analyzing the alphabetic sequence using a set of phonics rules.

5

72. A processor-readable storage medium embodying processor program instructions for execution by a processor, the processor program instructions adapting a processor to teach phonics to a player, the processor program instructions including:

10

determining an alphabetic sequence from lettered objects arranged by the player;

receiving a selection signal corresponding to a selected element of the alphabetic sequence;

15

generating a phoneme for the selected element of the alphabetic sequence; and

generating an audio signal according to the phoneme.

20

73. The processor-readable storage medium of Claim 72, wherein the processor program instructions for generating the phoneme include:

matching the alphabetic sequence with a word stored in a word dictionary;

25

reading a phoneme key for the selected element of the alphabetic sequence associated with the word in the word dictionary; and

generating the phoneme from the phoneme key.

30

74. The processor-readable storage medium of Claim 73, the processor program instructions further including:

reading visual display instructions associated with the word in the word dictionary; and

generating visual display signals according to the visual display instructions.

35

75. The processor-readable storage medium of Claim 72, wherein the processor program instructions for generating the phoneme include:

determining that the alphabetic sequence does not match a word stored in a word dictionary; and

generating the phoneme by analyzing the alphabetic sequence using a set of phonics rules.

76. The processor-readable storage medium of Claim 75, the processor program instructions further including:

generating visual display instructions by analyzing the alphabetic sequence using a set of phonics rules; and

generating visual display signals according to the visual display instructions.

77. A processor-readable storage medium embodying processor program instructions for execution by a processor, the processor program instructions adapting a processor to teach phonics to a player, the processor program instructions including:

determining an alphabetic sequence from lettered objects placed by the player in a plurality of object sensing stations;

matching the alphabetic sequence with a word stored in a word dictionary;

reading a phoneme key sequence associated with the word in the word dictionary;

generating the phoneme sequence from the phoneme key sequence;

generating an audio signal according to the phoneme sequence;

reading visual display instructions associated with the word in the word dictionary; and

lighting one of a plurality of lighting features
associated with the plurality of stations using the
5 visual display instructions.

78. A processor-readable storage medium embodying processor
program instructions for execution by a processor, the
10 processor program instructions adapting a processor to
teach phonics to a player, the processor program
instructions including:

determining an alphabetic sequence from lettered
objects placed by the player in the plurality of stations;

15 generating the phoneme by analyzing the alphabetic
sequence using a set of phonics rules;

generating an audio signal according to the phoneme
sequence;

20 generating visual display instructions by analyzing
the alphabetic sequence using a set of phonics rules; and

lighting one of a plurality of lighting features
associated with the plurality of stations using the visual
display instructions.

25

30

35